IN THE CLAIMS

Kindly enter the following claims.

1. (original) A method of detecting an anti-mycobacterial CD8 T cell response comprising contacting a population of CD8 T cells of an individual with one or more peptides selected from the peptides represented by SEQ ID NO: 3, 4, 7, 8, 9,10, 11 or 12, and, optionally, one or two further peptides represented by SEQ ID NO:1 and/or 2, wherein one or more of said peptides may be substituted by an analogue which binds a T cell receptor that recognises the corresponding substituted peptide, and determining whether CD8 T cells of the CD8 T cell population recognize the peptide(s).

2. (original) A method according to claim 1 wherein a peptide panel is employed consisting of the peptides represented by SEQ ID NOs:3, 4, 8, 9 and 10, wherein one or more of these peptides may be substituted by said corresponding analogue

3. (original) A method according to claim 1 wherein a peptide panel is employed consisting of the peptides represented by SEQ ID NOs:1, 2, 3, 4, 8, 9 and 10, wherein one or more of these peptides may be substituted by said corresponding analogue.

4. (original) A method according to claim 1 wherein any analogue which is used is (i) at least 70% homologous, preferably at least 80% homologous, more preferably at least 90% homologous, to the entire corresponding substituted peptide, and/or (ii) has one or more deletions at the N-terminus and/or C-terminus in comparison to the corresponding substituted peptide, and/or (iii) has one or more conservative substitutions compared to the corresponding substituted peptide.

5. (original) A method according claim 1 in which the recognition of the peptide(s) by the CD8 T cells is determined by measuring secretion of a cytokine from the CD8 T cells.

6. (original) A method according to claim 5 in which IFN-γ secretion from the T cells is measured.

7. (original) A method according to claim 6 in which IFN-γ secretion from the CD8 T cells is determined by allowing secreted IFN-γ to bind an immobilised antibody specific to the cytokine and then determining the presence of antibody/cytokine complex.

8. (original) A method according to claim 1 in which the CD8 T cells are freshly isolated *ex vivo* cells from peripheral blood.

9. (original) A method according to claim 1 in which CD8 T cells are pre-cultured *in vitro* with the peptide(s).

10. (original) A method according to claim 1 in which the mycobacterium is *M. tuberculosis*.

11. (original) A method according to claim 1 wherein the population of CD8 T cells is from an individual to whom an anti-mycobacterial vaccine has been administered.

12. (original) A method according to claim 1 which is carried out *in vitro*.

13. (original) A method according to claim 1 comprising administering one or more polynucleotides capable of expressing in human cells peptides and/or analogues as defined in claim 1.

14. (original) A kit for carrying out a method according to claim 1 comprising one or more peptides selected from the peptides represented by SEQ ID NOs:3, 4, 7, 8, 9, 10, 11 or 12, and, optionally, one or two further peptides represented by SEQ ID NO:1 and/or 2, wherein one or more of said peptides may be substituted by an analogue

which binds a T cell receptor which recognises the corresponding substituted peptide, and optionally a means to detect recognition of the peptide(s) by CD8 T cells.

15. (original) A kit according to claim 14 consisting of the peptides represented by SEQ ID NOs:3, 4, 8, 9 and 10, wherein one or more of these peptides may be substituted by said corresponding analogue.

16. (original) A kit according to claim 14 consisting of the peptides represented by SEQ ID NOs:1, 2, 3, 4, 8, 9 and 10, wherein one or more of these peptides may be substituted by said corresponding analogue.

17. (original) A kit according to claim 14 which includes an antibody to IFN-γ.

18. (original) A kit according to claim 17 wherein said antibody is immobilised on a solid support and which optionally also includes a means to detect any antibody/IFN-γ complex.

19. (original) A kit for carrying out a method according to claim 13 comprising one or more polynucleotides capable of expressing in human cells one or more peptides selected from the peptides represented by SEQ ID NOs:3, 4, 7, 8, 9, 10, 11 or 12, and, optionally, one or two further peptides represented by SEQ ID NO:1 and/or 2, wherein one or more of said peptides may be substituted by an analogue which binds a T cell receptor which recognises the corresponding substituted peptide.

20. (original) A peptide whose sequence is represented by any one of SEQ ID NOs:3, 4, 5, 6, 7, 8, 9, 10, 11 or 12; or an analogue which binds a T cell receptor which recognises any one of SEQ ID NOs:3, 4, 5, 6, 7, 8, 9, 10, 11 or 12.

21. (original) A pharmaceutical composition a peptide or analogue as defined in claim 20.

22. (original) A method of vaccinating against infection by a mycobacterium, wherein the vaccination leads to a CD8 T cell response, comprising administering (i) a CD8 T cell epitope of a mycobacterium protein, (ii) an analogue of the epitope which is capable of inhibiting the binding of the epitope to a T cell receptor, (iii) a precursor of (i) or (ii) which is capable of being processed to provide (i) or (ii), or (iv) a polynucleotide which is capable of being expressed to provide (i), (ii) or (iii).

23. (original) A method according to claim 22 in which the mycobacterial protein is from *M. tuberculosis*.

24. (original) A method according to claim 22 wherein ESAT-6 or a fragment of ESAT-6 is employed.

25. (original) A method of vaccination which leads to a CD8 T cell response, the CD8 T cells of which are specific for a CD8 T cell epitope which is represented by any one of SEQ ID NOs:1, 2, 3, 4, 8, 9, 10, 11 or 12, or which epitope is present in the sequence represented by SEQ ID NO:7, said method comprising administering (i) a CD8 T cell epitope which is represented by any one of SEQ ID NOs:1, 2, 3, 4, 8, 9, 10, 11 or 12, or which is present in the sequence represented by SEQ ID NO:7, (ii) an analogue of the epitope which is capable of inhibiting the binding of the epitope to a T cell receptor, (iii) a precursor of (i) or (ii) which is capable of being processed to provide (i) or (ii) excluding ESAT-6 or fragments of ESAT-6, or (iv) a polynucleotide which is capable of being expressed to provide (i), (ii) or (iii).

26. (original) A pharmaceutical composition comprising an epitope, analogue, precursor or polynucleotide as defined in claim 25 and a pharmaceutically acceptable carrier or diluent.

27. (original) A vaccine comprising an adjuvant which stimulates a CD8 T cell response and (i), (ii), (iii) or (iv) as defined in claims 22, or a vaccine comprising (i), (ii), (iii) or (iv) as defined in claim 22 associated with a delivery system capable of stimulating a CD8 T cell response.